CENTRAL FAX CENTER

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Applicant: Ferguson et al. **Application No.: 09/263,358**

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

A method for communication of data, 1. (Previously Presented) implemented in a receiver, the method comprising:

receiving a forward error correction coded block; receiving a forward error correction code rate; receiving a symbol modulation rate;

decoding the received forward error correction block to produce a decoded block based on the forward error correction code rate and the symbol modulation rate:

dividing the decoded block into segments;

determining if a segment was received with an error;

correcting the segment received with an error using forward error correction; and

requesting retransmission of the segment received with an error only when the segment received with an error is not correctable.

- 2. (Previously Presented) The method of claim 1, further comprising: receiving a checksum in the segments to enable identification of segments received with an error.
 - 3. (Previously Presented) The method of claim 1, further comprising:

receiving a position number in the segments identifying a position of the segment within the frame.

- 4. (Previously Presented) The method of claim 1, further comprising:
 receiving the forward error correction block using multiple distinct
 communication channels.
- 5. (Previously Presented) The method of claim 1, further comprising: determining a number of segments received with an error; and determining a segment size for a communication channel based upon the determined number of segments received with an error.
- 6. (Previously Presented) The method of claim 5, further comprising:
 determining an error rate in each channel and a number of segments for each channel.
- 7. (Previously Presented) The method of claim 5, further comprising:
 determining a number of segments received with an error by counting a
 number of selective reject orders made to the transmitter.
- 8. (Previously Presented) The method of claim 5, further comprising:
 determining a number of frames according to a ratio of the number of
 segments received with an error to a number of segments received correctly.
 - 9. (Previously Presented) The method of claim 5, further comprising: determining a number of data bytes in a frame, X, from the formula:

$$-X = -H + \sqrt{\left(X_{\mathit{current}} + H_{\mathit{current}}\right) \times \frac{H}{R}}$$

where $X_{current}$ is the present number of data bytes in the frame, $H_{current}$ is the present frame overhead in bytes, H is the new overhead for the frame in bytes, and R is a ratio of segments received with an error to segments received correctly.

10. (Previously Presented) A method for providing wireless communication of digital signals, the method comprising:

providing a plurality of sub-channels within a channel;

establishing a network layer session with multiple subscriber units; and

allocating available sub-channels on an as-needed basis, whereby the number of provided sub-channels changes during the duration of the network layer session;

dividing a network layer frame into segments according to optimum segment sizes:

combining multiple segments into a segment block;

forward error correction encoding the segment block to produce a forward error correction block; and

receiving a request for retransmission only when a subscriber unit determines that a forward error correction block is not correctable.

- 11. (Previously Presented) The method of claim 10, further comprising: determining a segment size for the sub-channels based upon a predetermined number of segments received with an error.
 - 12. (Previously Presented) The method of claim 10, further comprising:

dynamically adjusting the frame size of a channel to control an effective throughput based upon the ratio of raw data transferred to a total number of bits used to carry information, including frame overhead and retransmissions.

13.-20. (Cancelled).

21. (Previously Presented) A remote subscriber unit for communication of data, the remote subscriber unit comprising:

a receiver configured to receive a forward error correction (FEC) block, FEC code rate and a symbol modulation rate;

an encoder configured to forward error correction decode the FEC block to produce a received block based on the FEC code rate and the symbol modulation rate;

a processor configured to divide the received block into segments, to determine if any segment was received with an error, and to correct the error using forward error correction; and

a transmitter configured to request retransmission only if the segment received with an error is not correctable.

- 22. (Previously Presented) The remote subscriber unit of claim 21, wherein the receiver is further configured to receive a checksum in the segments to enable identification of erroneously received segments.
- 23. (Previously Presented) The remote subscriber unit of claim 21, wherein the receiver is further configured to receive a position number in the segments identifying a position of the segment within the frame.

- 24. (Previously Presented) The remote subscriber unit of claim 21, wherein the receiver is further configured to receive the forward error correction block over multiple distinct communication channels.
- 25. (Previously Presented) The remote subscriber unit of claim 21, wherein the processor is further configured to determine the number of segments received at the receiver with an error, to determine the optimum segment size for the communication channel based upon the determined number of segments received with an error.